## COVER SHEET ED. ROAD DISTRICT NO. 7 ILLINOIS FED. AID PROJECT M-8003(9

## STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS**

# PLANS FOR PROPOSED FEDERAL AID PROJECT

F.A.P. ROUTE 344 (IL ROUTE 83 - BUSSE ROAD) MARK STREET TO TOUHY AVENUE

> **SECTION 08-00053-00-LT** PROJECT NO. M-8003(960)

LIGHTING **COOK AND DUPAGE COUNTY** 

C-91-223-08

R 11 E

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DESCRIPTION

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LIGHTING PLANS

WIRING DIAGRAM

LIGHTING DETAILS

SHEET NO.

2

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11-15

NO. 701101-01 OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE 701106-01 OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY 701421-01 LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS ≥ 45 MPH TO 55 MPH 701501-04 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED 701601-05 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NON TRAVERSABLE MEDIAN URBAN LANE CLOSURE, MULTILANE 2W WITH MOUNTABLE MEDIAN 701606-05 701701-05 URBAN LANE CLOSURE, MULTILANE INTERSECTION LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE 701801-03 TRAFFIC CONTROL DEVICES 701901

> END IMPROVEMENT BUSSE ROAD

Morse Ave Authur Ave Mark St Salt Creek March Rensenville

PROJECT LOCATED IN VILLAGE OF ELK GROVE VILLAGE

**BEGIN IMPROVEMENT** BUSSE ROAD STA. 998+85

LOCATION OF SECTION INDICATED THUS: -

P.E. SIGNATURE: P.E. NAME: DAVID MERTZ DATE: /6 MAY 2008

IL LICENSE NO.: 062-052068 LICENSE EXPIRATION: 11/30/2009



P.E. SIGNATURE: Dank M. MIL P.E. NAME: DEREK MALL

DATE: 5/14/08

IL LICENSE NO.: 062-051308 LICENSE EXPIRATION: 11/30/2009



PLANS PREPARED BY:





STA. 1078+33

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED. THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2007 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, SHALL GOVERN THIS WORK.

J.U.L.I.E.
JOINT UTILITY LOCATION
INFORMATION FOR EXCAVATION
1-800-892-0123 OR 811

LOCATION MAP (NOT TO SCALE)

NET AND GROSS PROJECT LENGTH: 11,200 FEET (2.1 MILES)

**CONTRACT NO. 63029** 

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00053-00-LT	COOK/DUPAGE	15	2
ILLINOIS ROUT	TE 83 (BUSSE	ROAD)	
SUMMARY OF QUANTITIES	S, GENERAL NO	res and	LEGEND

### **GENERAL NOTES**

#### SUMMARY OF QUANTITIES

4030-1E

20 Mill 21					
ITEM NO.	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY		
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2,230		
21300010	EXPLORATION TRENCH, SPECIAL	FOOT	2,351		
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	42		
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	42		
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	42		
25200100	SODDING	SQ YD	2,230		
25200200	SUPPLEMENTAL WATERING	UNIT	35		
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5-INCH	SQ FT	300		
44000600	SIDEWALK REMOVAL	SQ FT	300		
67100100	MOBILIZATION	L SUM	1		
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1		
80400100	ELECTRIC SERVICE INSTALLATION	EACH	2		
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1		
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	62		
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1,502		
81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	85		
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	986		
81603055	UNIT DUCT, 600V, 3-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE), 1" DIA. POLYETHYLENE	FOOT	2,839		
81603085	UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	22,250		
81702460	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 3/0	FOOT	95		
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,410		
82500505	LIGHTING CONTROLLER, SPECIAL	EACH	2		
83017400	LIGHT POLE, ALUMINUM, TRANSFORMER BASE, 45 FT. M.H., 10 FT. DAVIT ARM	EACH	108		
83017600	LIGHT POLE, ALUMINUM, TRANSFORMER BASE, 45 FT. M.H., 15 FT. DAVIT ARM	EACH	8		
83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	1,160		
83600215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	225		
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		
Z0076600	TRAINEES	HOUR	500		
X0325379	DIRECTIONAL BORING	FOOT	23,369		
XX006352	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT (SPECIAL)	EACH	115		
XX006825	LIGHTING UNIT, 30 FT. M.H., 250 WATT LUMINAIRE	EACH	21		
XX007487	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT (SPECIAL)	EACH	1		
XX007488	LIGHT POLE FOUNDATION METAL, 11.5" BOLT CIRCLE, 8" X 6'	EACH	21		

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### **LEGEND**

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PROPOSED LITHONIA LIGHTING UNIT 400 WATT HPS, 240V, MC III, 45' MH, 10' MA

PROPOSED LITHONIA LIGHTING UNIT 400 WATT HPS, 240V, MC III, 45' MH, 15' MA

PROPOSED LITHONIA LIGHTING UNIT 250 WATT HPS, 240 V, MC III, 45' MH, 10' MA

PROPOSED KIM LIGHTING UNIT 250 WATT HPS, 240V, MC III, 30' MH, 0.67' MA

UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE UNIT DUCT, 600V, 3-1C NO.8, 1/C NO.8 GROUND,

(XLP—TYPE USE), 1" DIA. POLYETHYLENE

PROPOSED GALVANIZED STEEL CONDUIT

SIZE AS SPECIFIED

EXISTING KIM LIGHTING UNIT 250 WATT HPS, 120V, MC III, 30' MH, 0.67' MA EXISTING KIM LIGHTING UNIT 150 WATT HPS, 120V, MC III, 25' MH, 0.67' MA

#### SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

- ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION ON JANUARY 1, 2007.
- 2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS"; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", ADOPTED JANUARY 1, 2007; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TREAFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS"; THE "SPECIAL PROVISIONS AND IDOT STANDARD DRAWINGS" INCLUDED IN THE CONTRACT DOCUMENTS; NATIONAL ELECTRICAL CODE (NEC) 2008 EDITION; AND THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA) "AMERICAN NATIONAL STANDARD PRACTICE FOR ROADWAY LIGHTING" (RP-8-00).
- ANY REFERENCE TO "STANDARD" THROUGHOUT THE PLANS, SPECIAL PROVISIONS OR THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN THE LATEST VERSION OF THAT IDOT STANDARD DRAWING.
- 4. ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE "STANDARD SPECIFICATIONS".
- ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER. ALL REFERENCES TO "VILLAGE" SHALL BE INTERPRETED TO MEAN THE VILLAGE OF ELK GROVE VILLAGE.

#### LANDSCAPING

 WHEN DIRECTED BY THE ENGINEER, SUPPLEMENTAL WATERING SHALL BE APPLIED TO ALL SODDED AREAS PRIOR TO FINAL ACCEPTANCE, AT A RATE SPECIFIED BY THE ENGINEER AND IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS".

#### UTILITIES

- THE CONTRACTOR SHALL COOPERATE WITH THE VILLAGE IN ANY UNDERGROUND UTILITY CONSTRUCTION
  THAT THE VILLAGE MAY WANT TO INITIATE DURING THE CONTRACTOR'S OPERATIONS.
- 2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE, AND THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR WILL BE REQUIRED TO ASCERTAIN THE EXACT LOCATIONS OF SUCH UTILITIES AND EXERCISE CARE DURING HIS CONSTRUCTION OPERATIONS SO AS NOT TO DAMAGE THEM, IN ACCORDANCE WITH THE SPECIAL PROVISIONS AND ARTICLE 107.31 OF THE "STANDARD SPECIFICATIONS". THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITIES SO THAT THEIR FACILITIES MY BE LOCATED AND ADJUSTED OR MOVED, IN NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER AND THE VILLAGE. THIS WORK SHALL BE AT THE CONTRACTOR'S EXPENSE.
- 4. COORDINATION OF ANY UTILITY WORK INVOLVED IN THE CONSTRUCTION AREA WILL BE DISCUSSED AT THE PRECONSTRUCTION CONFERENCE.
- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL J.U.L.I.E. AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.
- THE CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR CONSTRUCTION STAGING NECESSARY TO ACCOMMODATE UTILITY RELOCATION OR ADJUSTMENT, AND/OR FOR DELAYS CAUSED BY UTILITY RELOCATION OR ADJUSTMENT.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND

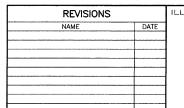
#### PERMITS

- . THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND CONTRACT OR PERMIT BONDS FROM THE VILLAGE OF ELK GROVE VILLAGE, COOK COUNTY OR ANY OTHER AGENCY THAT REQUIRES IT. ANY COSTS INCURRED BY THE CONTRACTOR WILL BE INCLUDED IN THIS CONTRACT.
- 2. INITIAL PLAN PERMIT FOR COOK COUNTY HAS BEEN APPLIED FOR. CONTRACTOR SHALL PROVIDE NECESSARY BOND AND INSURANCE, AND THE ASSOCIATED COSTS SHALL BE INCLUDED IN THIS CONTRACT.

#### MISCELLANEOU:

- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL 2 WEIGHTED SANDBAGS ON ANY TYPE I OR TYPE II BARRICADE USED (1 SANDBAG SHALL BE PLACED ACROSS EACH BOTTOM RAIL).
- PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, ANY WORK IS NOT REQUIRED, THAT ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 4. ALL WASTE MATERIAL SHALL BE LEGALLY DISPOSED OF OUTSIDE THE LIMITS OF THE R.O.W. AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROMPT CLEANUP AND DISPOSAL OF ANY AND ALL DEBRIS GENERATED BY OR INCIDENTAL TO WORK COVERED BY THIS CONTRACT.
- 5. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES, ORDINANCES AND REGULATIONS CONCERNING MAINTENANCE OF TRAFFIC
- 6. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE ANY LIGHT STANDARD IS ERECTED.
- ALL PUSHED CONDUITS ON PLANS SHALL BE DIRECTIONAL BORE AND QUANTITY SHALL BE PAID FOR AS CONDUIT PUSHED.
- 8. INSTALLATION METHOD OF THE UNIT DUCT SHALL BE DIRECTIONAL BORING. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR TRENCHING WHEN DIRECTIONAL BORING IS NOT POSSIBLE BECAUSE OF UTILITY OR OTHER CONFLICTS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS AND ESTABLISH FINSHED GRADE ELEVATION WITH THE TOP OF FOUNDATION OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER PRIOR TO INSTALLATION OF LIGHTING FOUNDATIONS.
- 10. GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE EXOTHERMICALLY WELDED AND SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO POURING CONCRETE OR BACKFILLING AS APPLICABLE.
- EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.
- 12. THE INSTALLATION OF BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK" SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER.
- ALL STREET LIGHT POLES ON DEVON AVENUE SHALL BE SET BACK A MINIMUM OF 6 FEET FROM THE BACK OF CURB.
- 14. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY ENGINEER.
- 15. CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED, THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE COUNTY, STATE OR THE VII LAGE.
- 16. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS ACCORDINGLY.
- 17. CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.
- 18. ALL DISTURBED AREA WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THE WORK MUST BE CONSIDERED INCIDENTAL TO THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.

CIRCUIT DESIGNATION SCHEME					
(TYPICAL)					
LIGHTING	CIRCUIT				
CONTROLLER DESIGNATION	POLE NUMBER ON GIVEN CIRCUIT				
	EGF H4				
	STA. XX+XX				
	X' E.O.P.				
	LIGHT POLE STATION AND OFFSET FROM EDGE OF PAVEMENT				

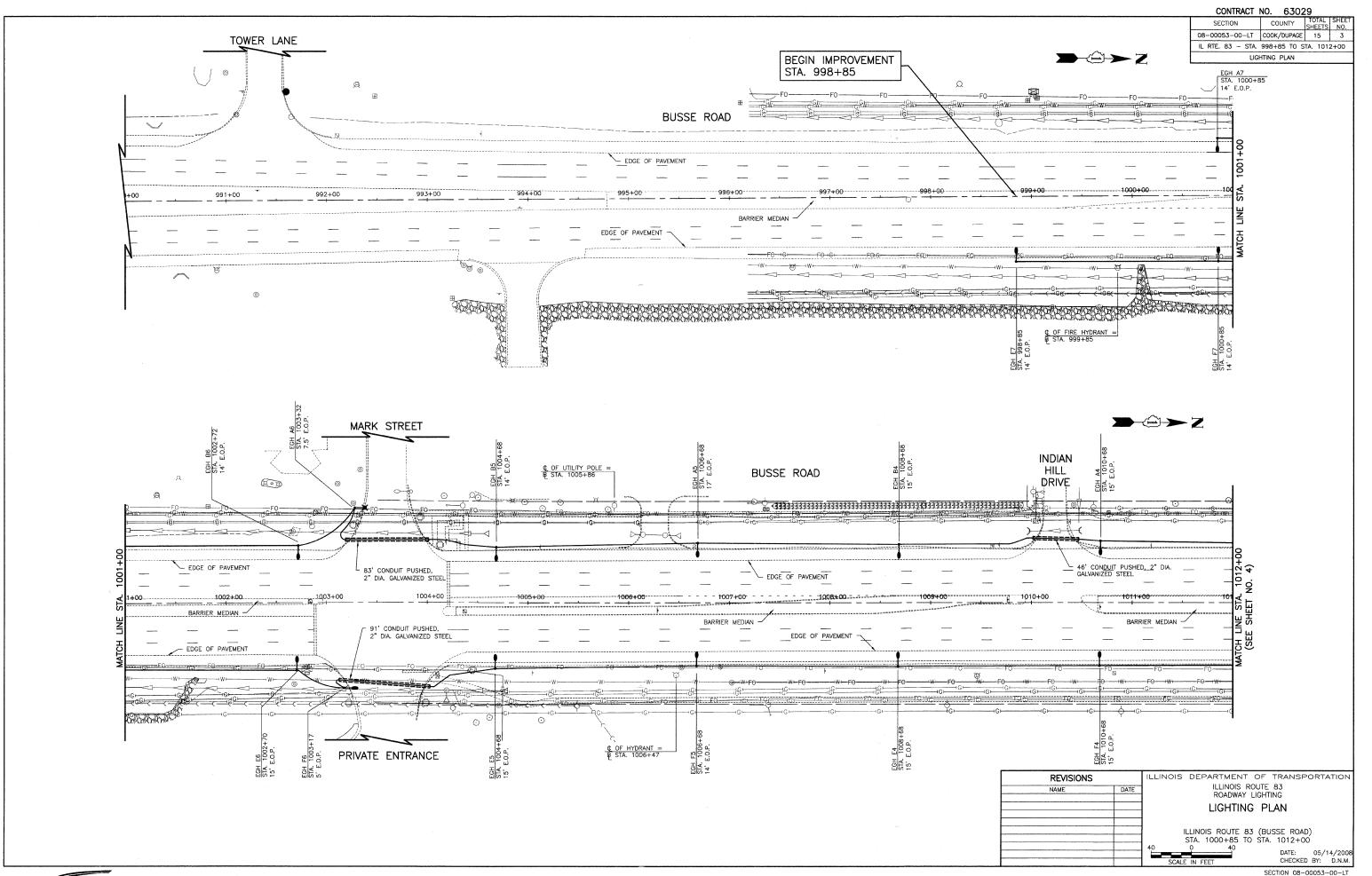


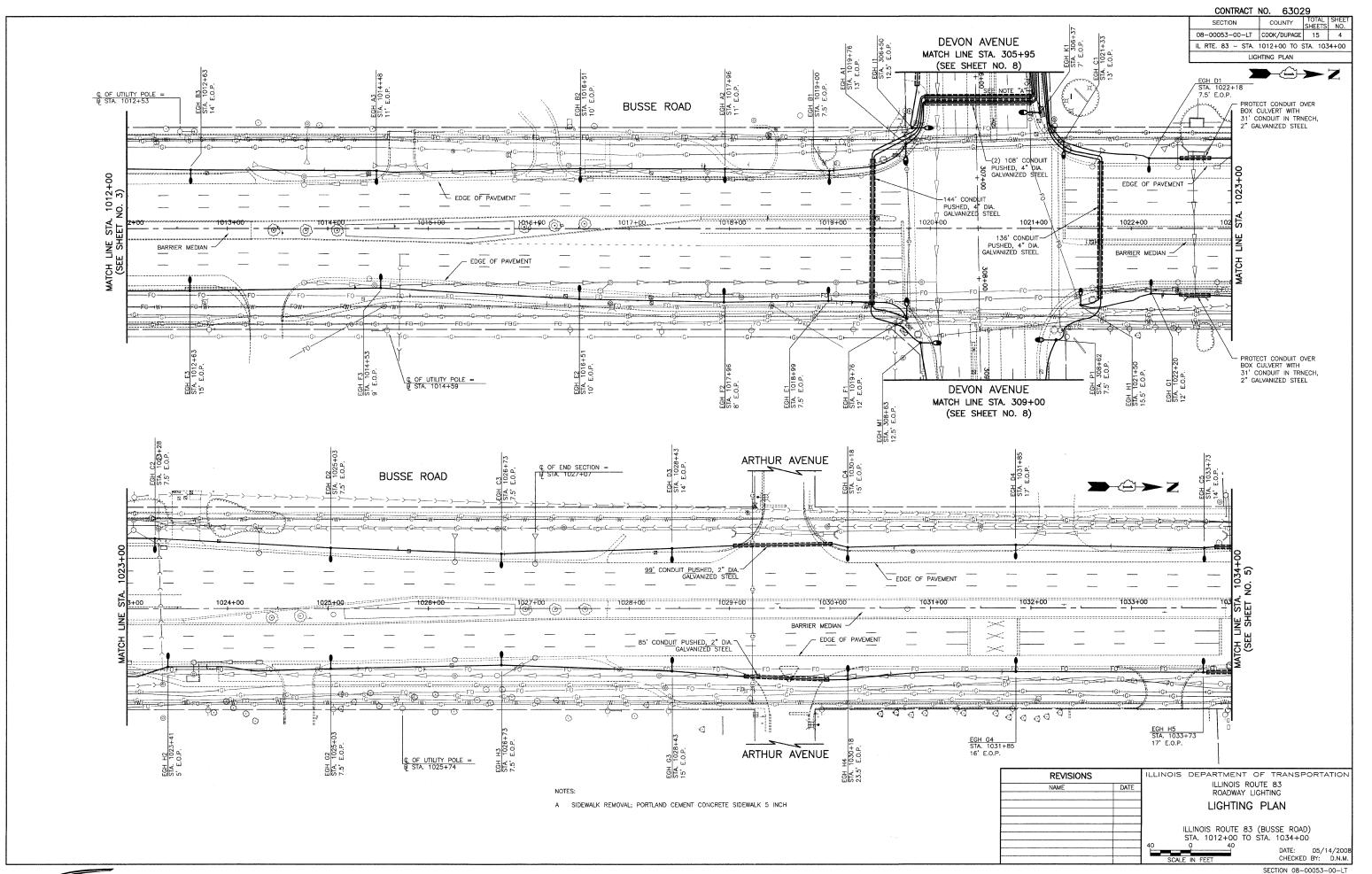
LLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 83
ROADWAY LIGHTING

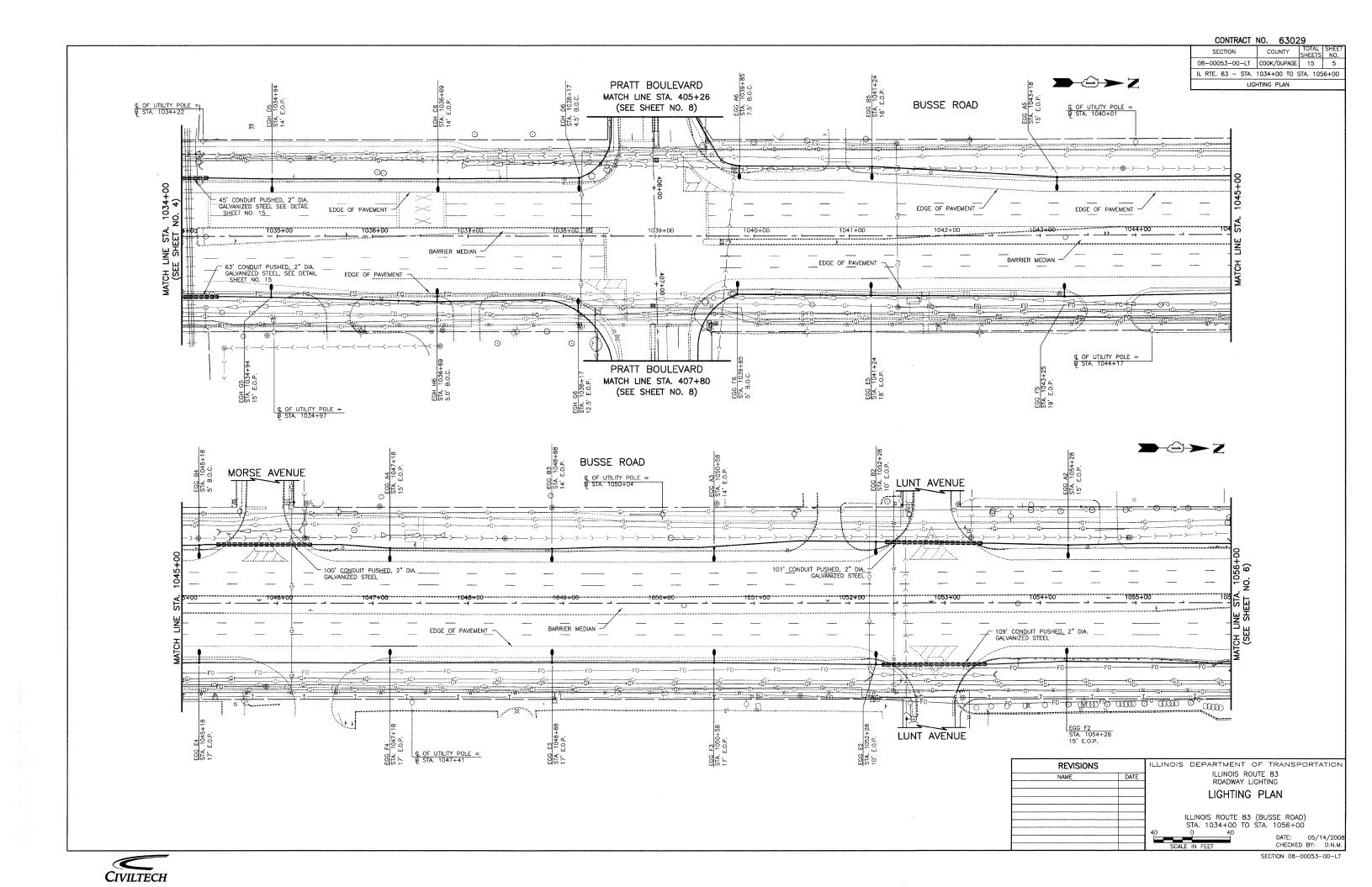
SUMMARY OF QUANTITIES, GENERAL NOTES AND LEGEND

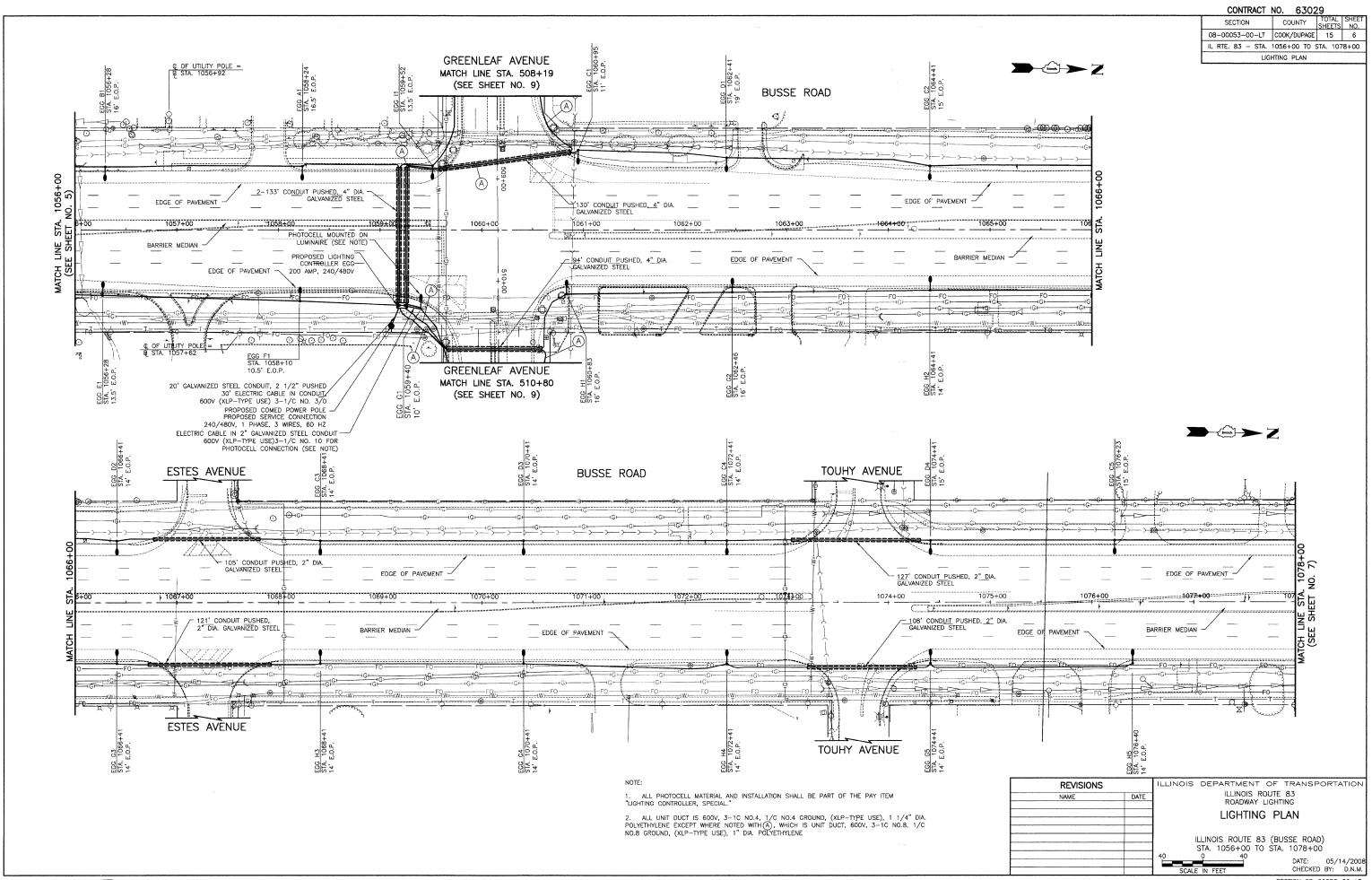
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 CONTRACT
 NO.
 63029

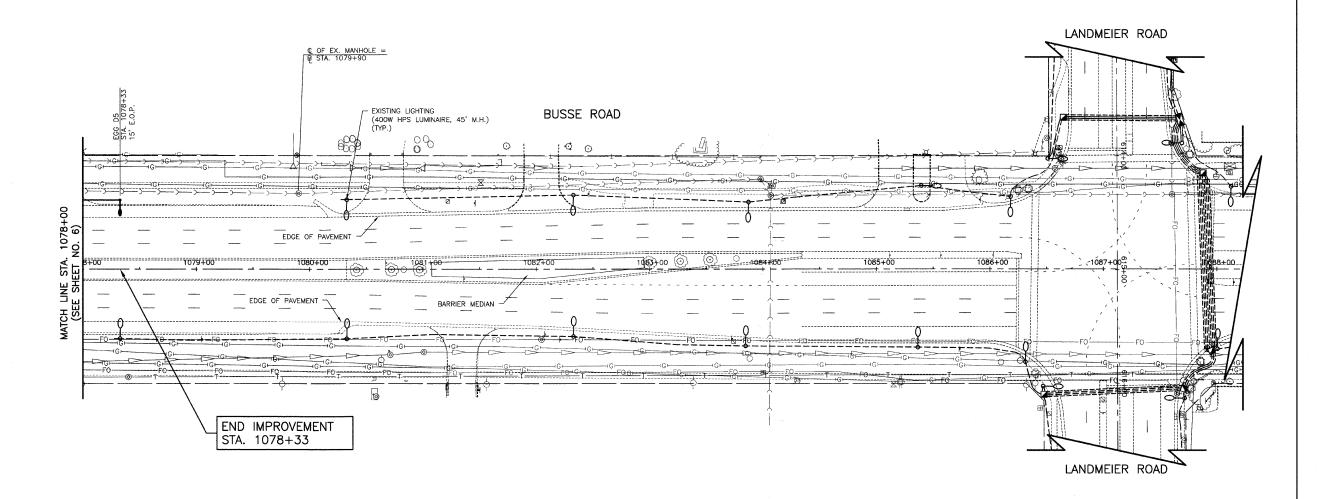
 SECTION
 COUNTY
 TOTAL SHEETS NO.

 08-00053-00-LT
 COOK/DUPAGE
 15
 7

 IL RTE. 83 - STA.
 1078+00 TO STA.
 1078+33

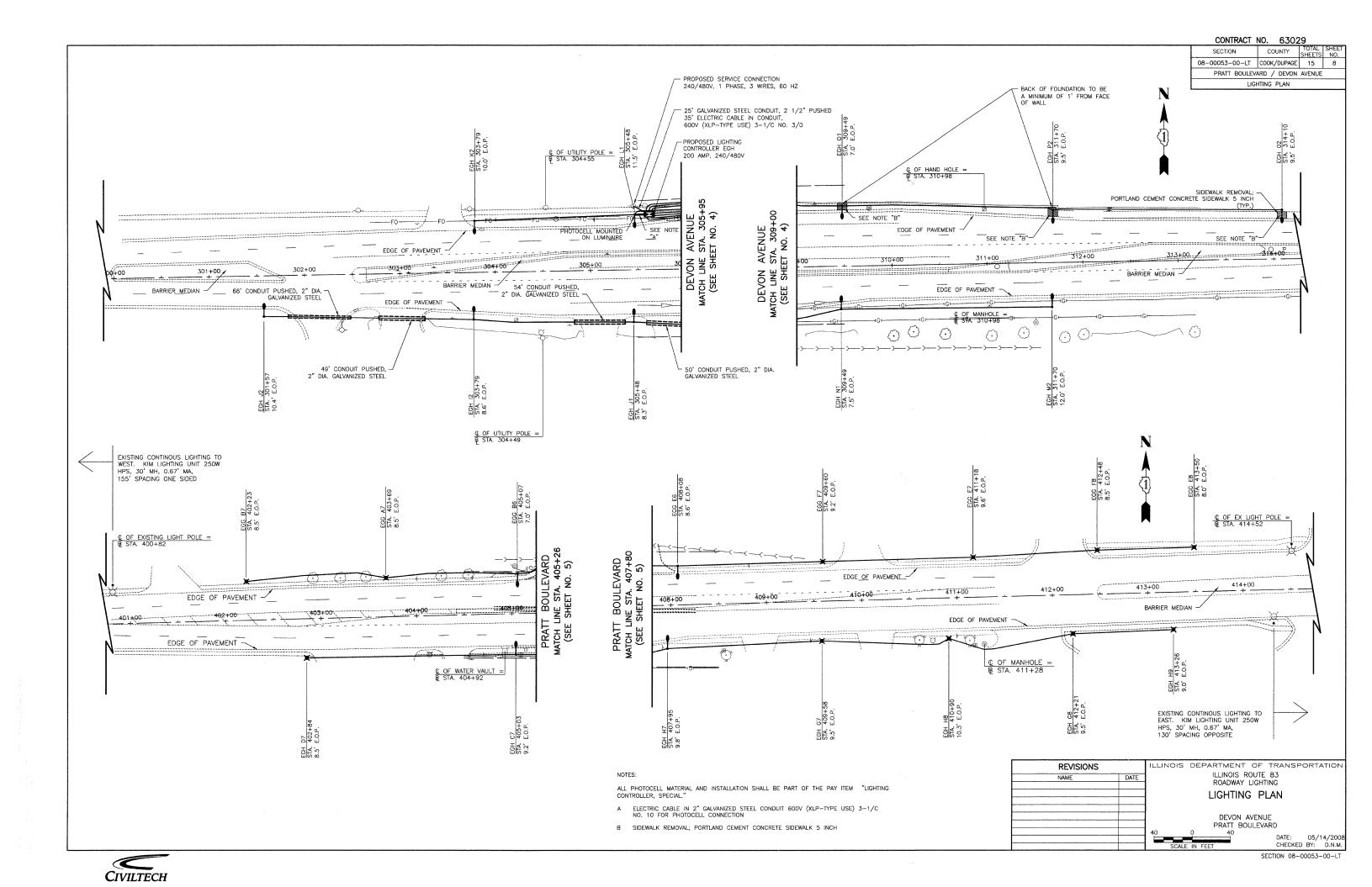
 LIGHTING PLAN

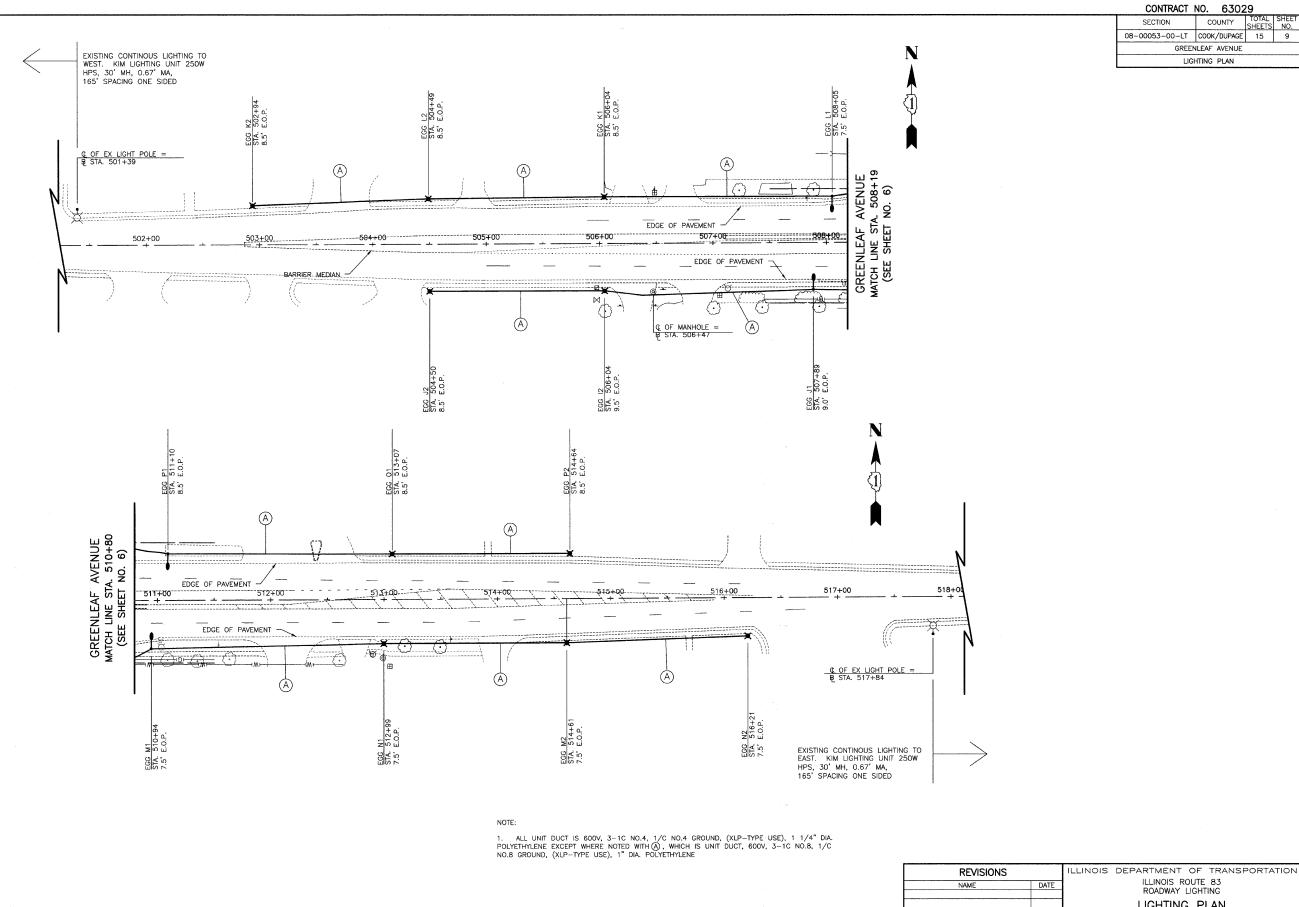




REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION			
NAME	DATE	ILLINOIS ROUTE 83 ROADWAY LIGHTING			
		LIGHTING PLAN			
		ILLINOIS ROUTE 83 (BUSSE ROAD)			
		STA. 1078+00 TO STA. 1078+33			
		40 0 40  DATE: 05/14/2008  SCALE IN FEET CHECKED BY: D.N.M.			







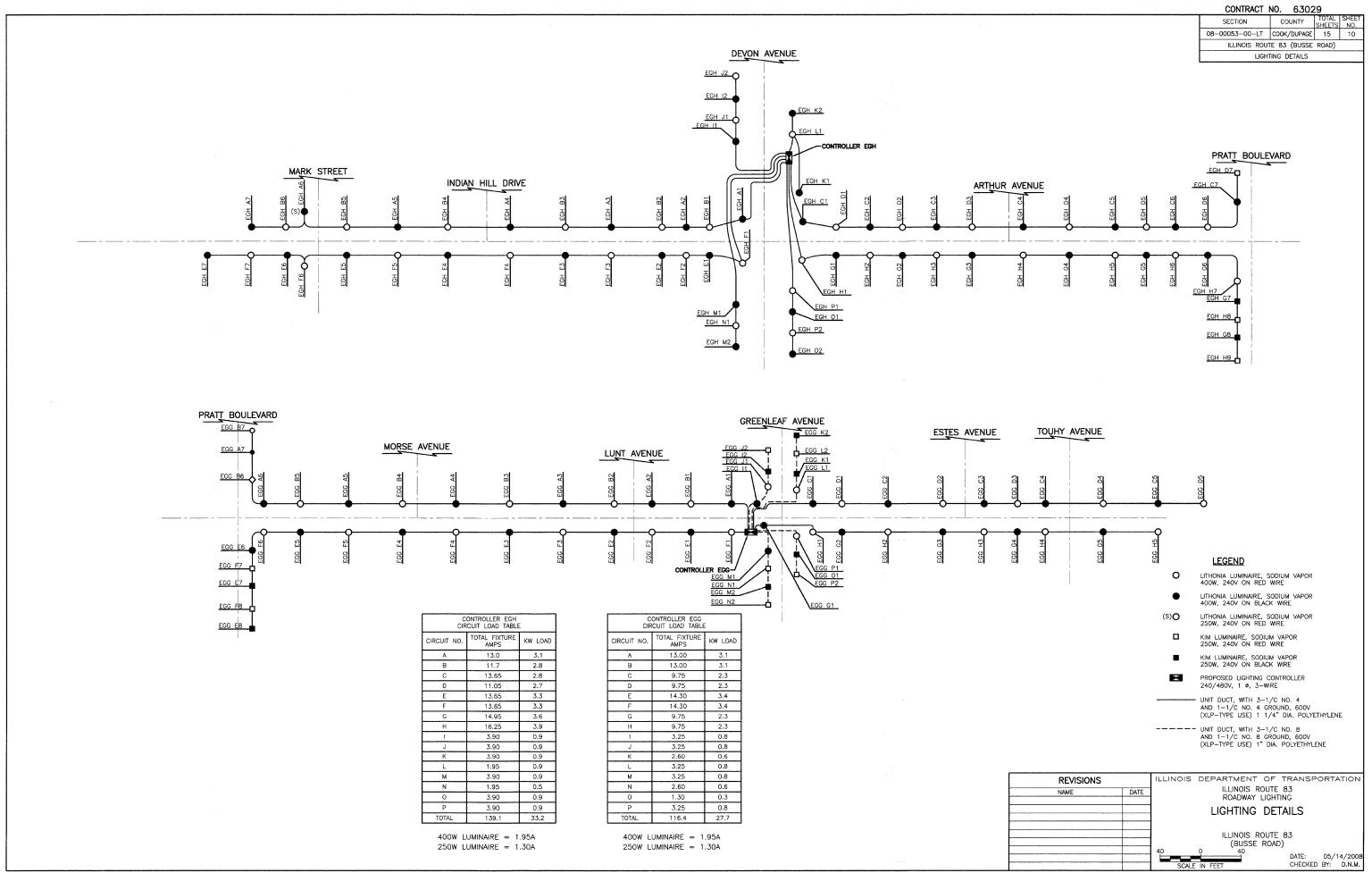
CIVILTECH

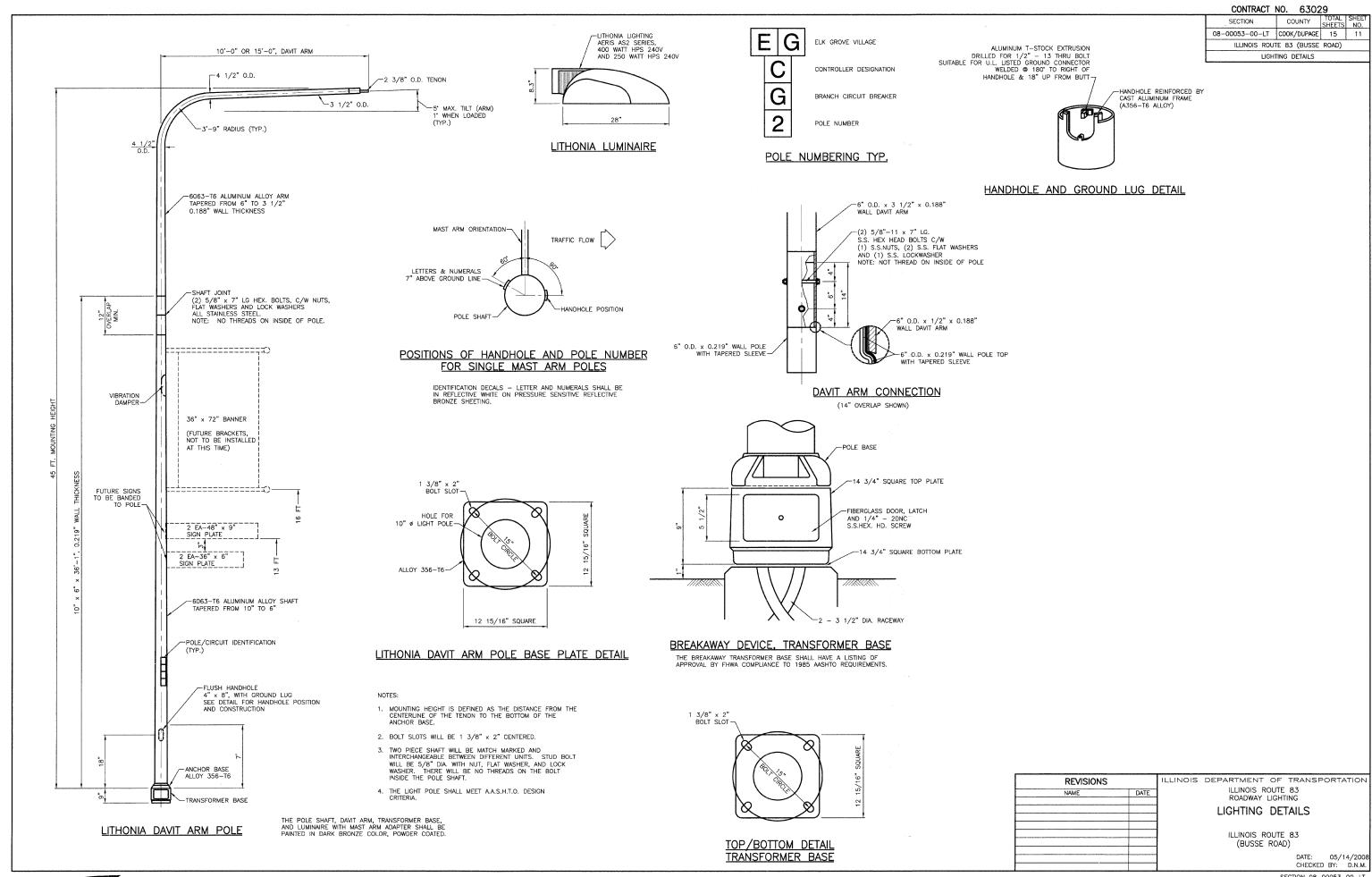
LIGHTING PLAN

GREENLEAF AVENUE

O 40
DATE: 05/14/2008
SCALE IN FEET CHECKED BY: D.N.M.

SECTION 08-00053-00-LT

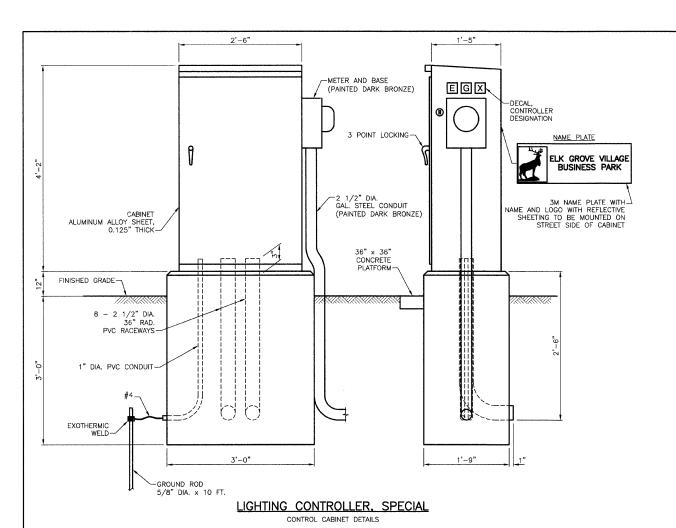




CIVILTECH

SECTION 08-00053-00-LT

CONTRACT NO. 63029 SECTION COUNTY TOTAL SHEETS NO. 08-00053-00-LT COOK/DUPAGE 15 12 ILLINOIS ROUTE 83 (BUSSE ROAD) LIGHTING DETAILS 4 1/2" DIA.-TAPERED ALUMINUM TUBE— (0.188") WALL ALLOY 6063—T6 DARK BRONZE, COLOR FINISH 30 FT. LIGHT STANDARD LUMINAIRE: KIM LIGHTING - AR3 MODEL (NO SUBSTITUTIONS) 250 WATT, H.P.S., M-C-III, 240V, 30 FT. M.H., 8 IN. SUPPORT ARM, DARK BRONZE-POWDER COAT FINISH POLE:
ROUND TAPERED ALUMINUM,
KIM-LIGHTING-LTRA30-8188
DARK BRONZE-POWDER COAT FINISH,
11-1/2" BOLT CIRCLE, OR APPROVED EQUAL LETTERS AND NUMERALS 7' ABOVE GROUND LINE HANDHOLE FRAME TAPERED 3/8"-16 N.C. FOR GROUND LUG 8" OUTSIDE \
BOTTOM DIAMETER -HANDHOLE BASE FLANGE ALLOY 356-T6 WITH BOLT— COVERS FASTENED WITH 1/4" 20 THREADED STEEL REINFORCED PLASTIC FASTENERS EXIST. GROUND KIM LIGHTING UNIT DETAIL — 11½" BOLT CIRCLE FOR 30' LIGHTING STANDARD KIM LIGHTING UNIT ANCHOR BASE DETAIL ILLINOIS DEPARTMENT OF TRANSPORTATION REVISIONS ILLINOIS ROUTE 83 ROADWAY LIGHTING NAME LIGHTING DETAILS ILLINOIS ROUTE 83 (BUSSE ROAD) DATE: 05/14/2008 CHECKED BY: D.N.M.



NOTES

THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET DOOR SHALL BE NEMA TYPE 3R CONSTRUCTION WITH NEOPRENE GASKET. THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

THE CONTRACTOR SHALL REMOVE VEGETATION AND TOPSOIL, LEVEL THE AREA IN FRONT OF THE CONTROL CABINET DOOR AND PLACE LENGTHWISE, PARALLEL TO CONTROL CABINET, A PRECAST PAD, 36" x 36" x 3" MINIMUM SIZE. THE COST OF LABOR AND MATERIALS SHALL BE INCIDENTAL TO THE CONTROL CABINET.

CONTROL WIRE SHALL BE #12 AWG, 600V, TYPE "SIS" STRANDED COPPER GRAY SWITCH BOARD WIRE. THE ENDS OF ALL CONTROL WIRES SHALL BE IDENTIFIED.

ALL WIRING WITHIN THE CABINET SHALL BE COLOR CODED AS INDICATED.  $R = RED \qquad BL = BLUE \qquad \qquad W = WHIT$ R = RED BL = BLUE B = BLACK Y = YELLOW

THE ELECTRIC METER BOX SHALL BE MOUNTED ON THE SIDE OF THE CONTROL CABINET, NEAR THE SERVICE POLE AND/OR AS DIRECTED BY THE ENGINEER.

ALL CONTROL CABINET ITEMS SHALL HAVE SUITABLE IDENTIFICATION. OPEN CIRCUIT BREAKERS, CONTACTORS AND OTHER OPEN DEVICES SHALL HAVE PERMANENT SELF STICKING TAGS. DEVICES IN ENCLOSURES SHALL HAVE ENGRAVED 2—COLOR LAMINATED PLASTIC NAMEPLATES HAVE ENGRAVED 2-COLOR EMINATED PLASTIC MAMERIATES ATTACHED TO ENCLOSURES WITH SCREWS. NAMEPLATES SHALL BE ENGRAVED TO CORRESPOND TO DESIGNATIONS ON THE DRAWINGS. INDICATED AS DIRECTED BY THE ENGINEER BY MEANS OF SELF—STICKING TAGS APPLIED AT EACH CONNECTED END. IDENTIFICATION SHALL BE MADE BY THE CABINET MANUFACTURER.

ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUSS CONNECTION AND GREEN FOR GROUND BUSS CONNECTORS.

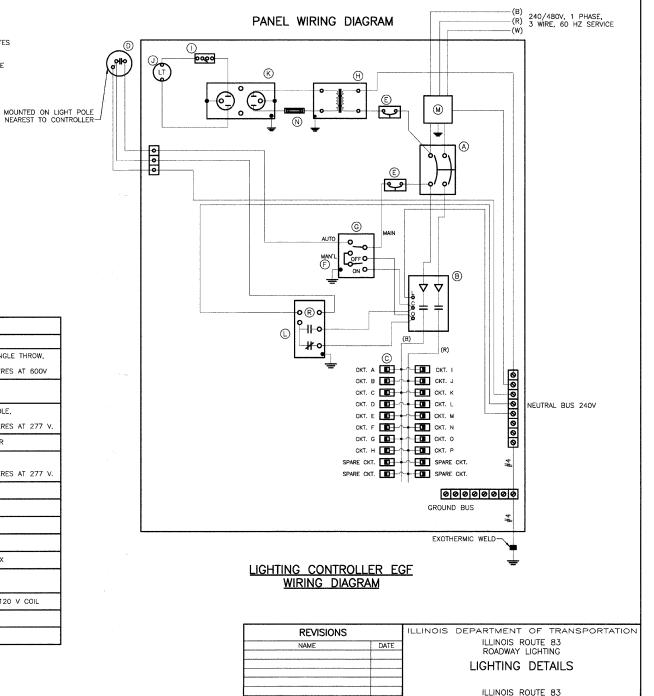
PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES WITHIN THE CONTROL CABINET.

THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL "ENCLOSED INDUSTRIAL CONTROL

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. THE HOLDER AND POUCH SHALL BE MOUNTED SO THAT RAINWATER OR CONDENSED WATER CANNOT ENTER THE POUCH WITH THE CABINET DOOR OPEN. FURNISH THE APPROVED COPY OF THE "CONTROL CABINET WIRING DIAGRAM".

THE CABINET, METER AND BASE, AND CONDUIT FOR THE METER SHALL BE PAINTED IN DARK BRONZE FINISH.

THE LIGHTING CONTROLLER CABINET SHALL BE PLACED SO THAT THE DOOR IS ORIENTED OPPOSITE TO TRAFFIC.



ITEM QUANT DESCRIPTION 200 AMP CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, SINGLE THROW,  $\bigcirc$ 600V FRAME, NON-INTERCHANGEABLE TRIP, BOLT ON TYPE; INTERRUPTING CAPACITY OF NOT LESS THAN 25,000 RMS SYMMETRICAL AMPERES AT 600V 200 A., ELECTRICALLY OPERATED AND MECHANICALLY HELD LIGHTING  $^{f B}$ 240/480 V. 1 PHASE PANEL BOARD WITH 200 A. COPPER MAINS SINGLE POLE, 30 A., 277 V. BOLT ON BRANCH CIRCUIT BREAKERS INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277 V. 0 20 0 PHOTO-ELECTRIC CELL, 120 V, MOUNT ON LIGHT POLE NEAREST CONTROLLER THERMAL MAGNETIC, MOLDED CASE CIRCUIT BREAKER, 1 POLE, 15 A., 277 V. BOLT ON TYPE. INTERRUPTING CAPACITY OF NOT LESS THAN 14,000 RMS SYMMETRICAL AMPERES AT 277 V. E F CONTROL SWITCH, MOMENTARY CONTACT, SPDT, 15 A., 240 V. (6) CONTROL SWITCH, TOGGLE TYPE, SPDT, 20 A., 240 V. SPEC, GRADE  $\oplus$ 240/120V. STEP DOWN CONTROL TRANSFORMER 750 VA RATED (1) MICRO SWITCH (MOUNTED WITH ACTUATOR TO SWITCH WHEN DOOR IS OPEN) **(**J) 60 WATT LIGHT FIXTURE VAPORTIGHT WITH GLOBE, GUARD AND MOUNTING BOX 120 VOLT, 15 A. GFCI RECEPTACLE, SPECIFICATION GRADE IN NEMA 5-15R WEATHERPROOF BOX WITH FLAP-TYPE COVER (K) (L) POWER RELAY WITH CONTACTS RATED FOR CONTACTOR INRUSH CURRENT - 120 V COIL M SURGE ARRESTOR, 5 WIRE EDCO "4803" OR EQUAL  $\mathbb{N}$ FUSE 600 VOLT 30 AMP

DEVICE SCHEDULE



CHECKED BY: D.N.M. SECTION 08-00053-00-LT

(BUSSE ROAD)

CONTRACT NO. 63029

08-00053-00-LT COOK/DUPAGE 15 13

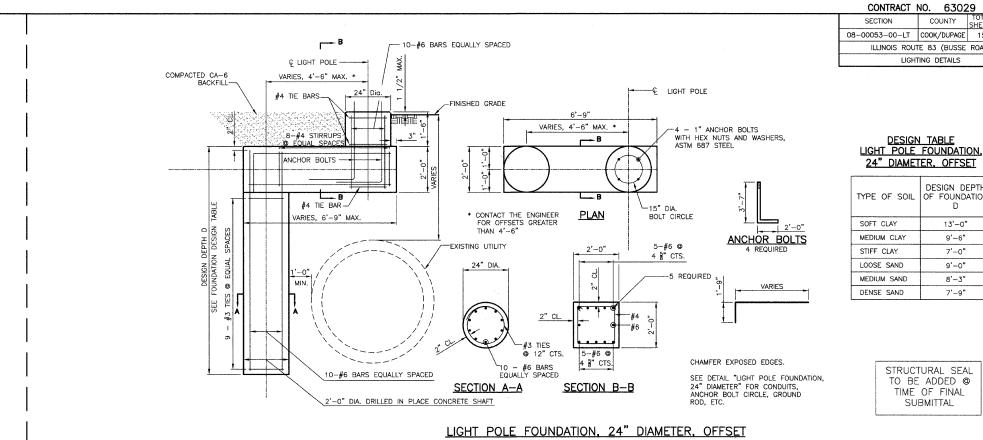
ILLINOIS ROUTE 83 (BUSSE ROAD)

LIGHTING DETAILS

COUNTY

SECTION

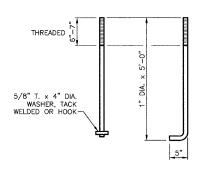
TOTAL SHEE



COUNTY TOTAL SHEE SHEETS NO. 08-00053-00-LT COOK/DUPAGE 15 14 ILLINOIS ROUTE 83 (BUSSE ROAD)

24" DIAMETER, OFFSET

TYPE OF SOIL	DESIGN DEPTH OF FOUNDATION D
SOFT CLAY	13'-0"
MEDIUM CLAY	9'-6"
STIFF CLAY	7'-0"
LOOSE SAND	9'-0"
MEDIUM SAND	8'-3"
DENSE SAND	7' 0"



ANCHOR BOLT DETAIL

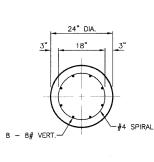
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE. THE CONTRACTOR SHALL NOT ORDER REINFORCEMENT BARS UNTIL THE OFFSET AND DIMENSION D ARE DETERMINED.
- 2. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" OR 30" IN DIAMETER.
- 3. THE CONTRACTOR SHALL USE #3 SPIRAL AT 6" PITCH OR AT HIS OPTION MAY SUBSTITUTE #3 TIES AT 12" CENTER.
- THE ANCHOR SHALL BE A TACK WELDED TYPE BOLT OR HOOK TYPE BOLT. COLD BENDING OF THE HOOK BOLT WILL NOT BE ALLOWED.
- 5. THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONRETE IS PLACED IN THE FORM. THE ENTIRE LENGTH OF THE ANCHOR BOLTS AS WELL AS THE NUTS AND WASHERS SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM DESIGNATION A 153.
- CONCRETE SHALL BE CLASS "SI". CONCRETE FOUNDATION MUST BE CURED FOR (10) TEN DAYS BEFORE THE LIGHT STANDARD IS ERECTED.
- 8. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.
- 9. ANCHOR BOLTS SHALL PROJECT 3" ABOVE THE TOP OF THE FOUNDATION.
- 10. RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
- 11. THE CONTRACTOR SHALL COORDINATE THE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S
- 12. A MINIMUM OF 3" OF THE THREADING ON THE ANCHOR BOLTS SHALL REMAIN BELOW THE TOP OF THE FOUNDATION.

REVISIONS		ILLINOIS	DEP
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PARTMENT OF TRANSPORTATION ILLINOIS ROUTE 83 ROADWAY LIGHTING JIGHTING DETAILS ILLINOIS ROUTE 83 (BUSSE ROAD)

> 05/14/2008 CHECKED BY: D.N.M.

LIGHT POLE FOUNDATION, 24" DIAMETER



24" DIA.

TOP VIEW

-3 1/2" DIA. RACEWAYS PARALLEL TO EDGE OF PAVEMENT

-ANCHOR BOLT (ASTM 687) 4'-1" DIA. x 5'-0" (SEE NOTE 12)

-1/2" - 1" CHAMFER

-EXOTHERMIC WELD CONNECTION TO REINFORCING STEEL AND ANCHOR BOLT

AT TOP & BOTTOM

-3 1/2" DIA. x 36" R (2) RACEWAYS

GROUND CONDUCTOR SLEEVE 1" PVC DUCT-

#2/0 BARE COPPER-

EXOTHERMIC

GROUND ROD-5/8" DIA. × 10' LONG

WELD CONNECTION

SECTION A-A

### DESIGN TABLE - LIGHT POLE FOUNDATION. 24" DIAMETER

	T = =====					
	DESIGN DEPTH OF FOUNDATION		REINFORCEMENT IN FOUNDATION			
TYPE OF SOIL	SINGLE ARM D	TWIN ARM	SINGLE ARM TWIN ARM			
		D	VERT. BARS	SPIRAL	VERT. BARS	SPIRAL
SOFT CLAY	13'-0"	15'-0"	8-#6 × 12'-6"	#3 × 122'	8-#6 x 14'-3"	#3 x 141'
MEDIUM CLAY	9'-6"	10'-9"	8-#6 x 9'-0"	#3 × 90'	8-#6 × 10'-0"	#3 × 100'
STIFF CLAY	7'-0"	8'-0"	8-#6 x 6'-6"	#3 × 66'	8-#6 × 7'-6"	#3 × 76'
LOOSE SAND	10'-0"	11'-0"	8-#6 × 9'-6"	#3 × 94'	8-#6 x 10'-6"	#3 ×103'
MEDIUM SAND	8'-3"	9'-0"	8-#6 × 8'-0"	#3 × 78'	8-#6 × 8'-6"	#3 × 85'
DENSE SAND	7'-9"	9'-0"	8-#6 × 7'-6"	#3 × 73'	8-#6 × 8'-6"	#3 × 85'
ROCK OR SOLIDIFIED SLAG	5'-0"	5'-0"	NONE	NONE	NONE	NONE

